

IN THE CLAIMS

The pending claims are as follows:

1. (Previously Presented) A thermal conducting material comprising:
a non-curable viscous matrix material including a substantial volume fraction of thermal grease; and
a distribution of carbon fibers suspended within the matrix material.
2. (Original) The thermal conducting material of claim 1, wherein the carbon fibers are randomly oriented in the viscous matrix material.
3. (Original) The thermal conducting material of claim 1, further including a second distribution of thermally conductive particles within the viscous matrix material.
4. (Original) The thermal conducting material of claim 3, wherein the second distribution of thermally conductive particles includes at least one particle selected from the group consisting of aluminum nitride (AlN), aluminum oxide (Al₂O₃), boron nitride (BN), aluminum, and copper.
5. (Previously Presented) An information handling system comprising:
a random access memory device;
a processor device;
a thermal conducting material coupled to the processor device, including:
a viscous matrix material for indefinitely maintaining a level of viscosity including a substantial volume fraction of thermal grease;
a distribution of carbon fibers within the viscous matrix material wherein orientation and location of carbon fibers relative to each other are movable upon flow of the matrix material;
a heat transfer device coupled to the thermal conducting material; and
a system bus coupling the random access memory device and the processor device.

6. (Original) The information handling system of claim 5, wherein the amount of the distribution of carbon fibers in the viscous matrix material is between about 10% - 20% by weight.
7. (Original) The information handling system of claim 5, wherein the viscous matrix material includes a silicone oil based matrix material.
8. (Original) The information handling system of claim 5, further including a distribution of aluminum nitride (AlN) particles within the viscous matrix material.
9. (Previously Presented) A method of manufacturing a heat transfer contact, comprising:
 - mixing a thermal conduction material, including;
 - selecting a volume of a non-adhesive viscous matrix material including a substantial volume fraction of thermal grease;
 - suspending a number of carbon fibers with a substantially random orientation in three dimensions within the non-adhesive viscous matrix material;
 - spreading the thermal conduction material onto the surface to create a surface/thermal conduction material interface;
 - contacting a heat transfer device to the thermal conduction material to create a heat transfer device/thermal conduction material interface.
10. (Original) The method of claim 9, wherein providing a viscous material includes providing a silicone oil based material.
11. (Original) The method of claim 9, wherein distributing a number of carbon fibers includes distributing an amount of carbon fibers in the viscous matrix material that is between about 10% - 20% by weight.

12. (Original) The method of claim 9, further including distributing an number of aluminum nitride (AlN) particles within the viscous matrix material.

13. (Previously Presented) A method of manufacturing a thermal interface material comprising:

selecting a volume of a non-curable viscous matrix material including a substantial volume fraction of thermal grease; and

suspending a number of carbon fibers within the non-curable viscous matrix material wherein orientation and location of carbon fibers relative to each other are movable upon flow of the matrix material.

14. (Original) The method of claim 13, wherein providing a viscous material includes providing a silicone oil based viscous material.

15. (Original) The method of claim 13, wherein distributing a number of carbon fibers includes distributing an amount of carbon fibers in the viscous matrix material that is between about 10% - 20% by weight.

16. (Original) The method of claim 13, further including distributing an number of aluminum nitride (AlN) particles within the viscous matrix material.

17. (Previously Presented) A method of cooling a surface, comprising:

conducting heat from the surface through a surface/thermal conduction material interface;

conducting heat through a thermal conduction material, wherein the thermal conduction material includes a substantial volume fraction of viscous thermal grease material with a distribution of carbon fibers suspended in a substantially random orientation in three dimensions within the viscous thermal grease material; and

conducting heat through a thermal conduction material/heat transfer device interface.

18. (Previously Presented) The method of claim 17, wherein conducting heat through a thermal conduction material includes conducting heat through a silicone oil based thermal grease material with a distribution of carbon fibers within the silicone oil based thermal grease material.